



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/342,768	06/29/1999	SCOTT BERMINGHAM DOYLE	17286	7075

7590 02/26/2004

THE WHITAKER CORPORATION
4550 NEW LINDEN HILL ROAD
SUITE 450
WILMINGTON, DE 19808

EXAMINER

NGUYEN, THUAN T

ART UNIT	PAPER NUMBER
----------	--------------

2685

DATE MAILED: 02/26/2004

17

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/342,768

Applicant(s)

DOYLE ET AL.

Examiner

THUAN T. NGUYEN

Art Unit

2685

— The MAILING DATE of this communication appears on the cover sheet with the correspondence address —

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 6/29/99 & 07/18/01 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

Art Unit: 2685

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/16/04 has been entered.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-6 are rejected under 35 U.S.C. 102(e) as being anticipated by Sydor et al. (U.S. Patent No. 6,473,616 B1/ or "Sydor" hereinafter).

Regarding claim 1, Sydor discloses "a local multipoint distribution service system (LDMS) having comprising an antenna for transmitting a signal of reused frequency within a specified range from the antenna, the antenna having multiple radiating antenna elements provided with the

Art Unit: 2685

signal, the signal provided to each of the antenna elements being adjusted in phase and in amplitude across the radiating elements to mitigate radiation above horizon, and the signal provided to each of the antenna elements being adjusted in phase and in amplitude to decrease attenuation in radiated power with distance from the antenna” (see col. 2/line 32 to col. 4/line 21 for LMDS and its benefits; col. 6/line 51 to col. 7/line 18 for frequency reused in the LMDS system; col. 9/lines 7-43, col. 11/line 45-col. 12/line 28, and col. 14/line 45 to col. 15/line 35 for amplitude and phase angle of radiating antenna elements being adjusted; and col. 18/lines 29-47 for mitigating radiation above horizon of the signal provided to each of the radiating elements of the antenna; and col. 9/lines 30-43 and col. 15/lines 1-36 for sidelobe levels referred to attenuation in radiated power with distance away from the antenna addressed).

As for claim 2, in further view of claim 1 above, Sydor further suggests the step of “each of the antenna elements being adjusted in phase and amplitude of signal across the antenna elements to mitigate nulls between lobes of combined radiated signals collectively from the antenna elements”, i.e., the maximum and minimum power level is maintained by implementing the low sidelobe or shape beam antennas in adjacent sectors (see col. 9/lines 7-43, and col. 11/line 45 to col. 12/line 28, col. 13/lines 5-24, and col. 18/lines 29-47 for minimum and maximum range of power levels).

With respect to claim 3, in further view of claim 1 above, Sydor further reveals “each of the antenna elements being adjusted in phase and in amplitude of signal across the antenna elements to reduce excess signal power at near range”, i.e., an excess power output is reduced at

Art Unit: 2685

near range or at adjacent sectors by eliminating unwanted energy from using low sidelobe antennas (see col. 15/lines 1-35, and col. 18/lines 29-47 for a -30dB sidelobes is maintained for mitigating interference at a reduced level as well as maximum and minimum range of power levels).

As for claims 4-6, a corresponding method for use in the disclosed system is rejected for the reasons given in the scope of the system claims 1-3 as already disclosed above.

Conclusion

4. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9306, (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II,

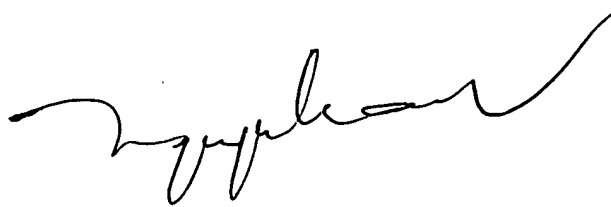
2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tony Thuan Nguyen whose telephone number is (703) 308-5860. The examiner can normally be reached on Monday-Friday from 9:30 AM to 7:00 PM, with alternate Fridays off.

Art Unit: 2685

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban, can be reached at (703) 305-4385.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the **Technology Center 2600 Customer Service Office** whose telephone number is (703) 306-0377.



TONY T. NGUYEN
PATENT EXAMINER, FSA

Tony T. Nguyen, FSA
Art Unit 2685
February 16, 2004